

**Committee: Education, Health, and Environmental Affairs**

**Testimony on: SB0528 Climate Solutions Now Act of 2022**

**Submitted by: Donald M. Goldberg, Executive Director**

**Position: Favorable with amendments**

**Hearing Date: February 15, 2022**

Climate Law & Policy Project urges a favorable report on Senate Bill 528. While we strongly support the bill in its current form, we believe it could be improved by the following amendments, several of which are technical.

CLPP is a member of Maryland Climate Partners and fully supports all the amendments submitted by that group. We are recommending an alternative approach for net-zero ready schools in the event that the Partners' proposed amendments regarding net-zero or net-zero ready schools are rejected.

Our main concern is that the requirement that each school district build one net-zero energy (NZE) school through June 2033 is far too limited. The cost of the three NZE schools built in Maryland demonstrate that the cost of a NZE school, inclusive of panels, is comparable to the cost of a conventional school. The two most recent NZE schools, Holabird Academy and Graceland Park/O'Donnell Heights, were constructed for the same cost as a conventional school, panels included. All these schools are much cheaper to operate. For more detail, please see Attachment A.

Wilde Lake's solar panels generate twice as much energy as the school consumes. We believe, particularly when operating costs are taken into consideration, it is fiscally imprudent to continue to build conventional schools. We therefore propose a requirement that all PK-12 schools not built to net-zero standards be net-zero ready, subject to IAC waiver based on cost. By net-zero ready, we mean everything that is included in a net-zero energy school except the installation of solar panels.

Proposed substantive amendments:

- Article — Education, Section 5-312.

(a) In this section, "high performance building" has the meaning stated in § 3-602.1 of the State Finance and Procurement Article.

**[(b)] IN THIS SECTION, "NET-ZERO READY" MEANS NET-ZERO ENERGY WITHOUT INSTALLED SOLAR PANELS BUT READY FOR INSTALLATION.**

(b) This section applies to the construction of new schools that have not initiated a Request For Proposal for the selection of an architectural and engineering consultant on or before July 1, 2009.

(c) **(1)** [Except] **SUBJECT TO PARAGRAPH (2) OF THIS SUBSECTION, AND EXCEPT** as provided in subsection (d) of this section, a new school that receives State public school construction funds shall be constructed to be a high performance building.

**(2) (I) EXCEPT AS PROVIDED IN SUBPARAGRAPH (II) OF THIS PARAGRAPH, THE NET-ZERO ENERGY REQUIREMENTS THAT APPLY FOR A BUILDING**

**TO MEET THE DEFINITION OF A “HIGH PERFORMANCE BUILDING” UNDER § 3–602.1 OF THE STATE FINANCE AND PROCUREMENT ARTICLE DO NOT APPLY TO PUBLIC SCHOOL BUILDINGS.**

**(II) SUBJECT TO THE AVAILABILITY OF FUNDING FROM THE NET–ZERO SCHOOL GRANT FUND ESTABLISHED UNDER § 9–2010 OF THE STATE GOVERNMENT ARTICLE, AT LEAST ONE OF THE SCHOOLS CONSTRUCTED IN EACH LOCAL SCHOOL SYSTEM FROM JULY 1, 2023, THROUGH JUNE 30, 2033, INCLUSIVE, SHALL BE CONSTRUCTED TO MEET NET–ZERO ENERGY REQUIREMENTS.**

**(III) A NEW SCHOOL THAT RECEIVES STATE PUBLIC SCHOOL CONSTRUCTION FUNDS THAT IS NOT CONSTRUCTED TO MEET NET–ZERO ENERGY REQUIREMENTS SHALL BE CONSTRUCTED TO MEET NET–ZERO READY REQUIREMENTS.**

(d) (1) The Interagency Commission shall establish a process to allow a school system to obtain a waiver from complying with subsection (c) of this section.

(2) The waiver process shall:

(i) Include a review by the Interagency Commission to determine if the construction of a high performance building is not practicable; and

(ii) Require the approval of a waiver by the Interagency Commission.

**(3) THE INTERAGENCY COMMISSION SHALL WAIVE THE REQUIREMENTS OF SUBSECTION (C)(2)(II) OF THIS SUBSECTION IF THE INTERAGENCY COMMISSION DETERMINES THAT:**

**(I) THE CONSTRUCTION OF A NET–ZERO ENERGY SCHOOL BUILDING IS NOT PRACTICABLE BECAUSE OF SPATIAL LIMITATIONS AT THE BUILDING SITE; OR**

**(II) WHEN TAKING INTO CONSIDERATION THE AVAILABILITY OF STATE COST SHARE FUNDS AND GRANTS FROM THE NET–ZERO SCHOOL GRANT FUND ESTABLISHED UNDER § 9–2010 OF THE STATE GOVERNMENT ARTICLE, THE COST TO THE LOCAL JURISDICTION OF CONSTRUCTING A NET–ZERO ENERGY SCHOOL BUILDING WOULD EXCEED THE COST OF CONSTRUCTING A TRADITIONAL, HIGH PERFORMANCE SCHOOL BUILDING.**

**(4) THE INTERAGENCY COMMISSION SHALL WAIVE THE REQUIREMENTS OF SUBSECTION (C)(2)(III) OF THIS SUBSECTION IF THE INTERAGENCY COMMISSION DETERMINES THAT:**

**(I) THE CONSTRUCTION OF A NET–ZERO READY SCHOOL BUILDING IS NOT PRACTICABLE BECAUSE OF SPATIAL LIMITATIONS AT THE BUILDING SITE; OR**

**(II) WHEN TAKING INTO CONSIDERATION THE AVAILABILITY OF**

**STATE COST SHARE FUNDS, THE COST TO THE LOCAL JURISDICTION OF CONSTRUCTING A NET-ZERO READY SCHOOL BUILDING WOULD EXCEED THE COST OF CONSTRUCTING A TRADITIONAL, HIGH PERFORMANCE SCHOOL BUILDING.**

(e) For fiscal years 2010 through 2014 only, the State shall pay 50% of the local share of the extra costs, identified and approved by the Interagency Commission, that are incurred in constructing a new school to meet the high performance building requirements of this section.

(f) **(1)** The Interagency Commission shall adopt regulations to implement the requirements of this section.

**(2) IN IMPLEMENTING NET-ZERO ENERGY REQUIREMENTS FOR SCHOOL BUILDINGS, THE INTERAGENCY COMMISSION SHALL CONSULT WITH THE CLIMATE TRANSITION AND CLEAN ENERGY HUB ESTABLISHED UNDER § 9-2011 OF THE STATE GOVERNMENT ARTICLE.**

- Article — State Government, Section 9-2010.

Delete subsections (C) AND (G)(1) and replace with:

**(C) THE PURPOSE OF THE FUND, IN ORDER OF PRIORITY, IS TO:**

**1. ASSIST LOCAL SCHOOL SYSTEMS TO COVER THE COST DIFFERENCE BETWEEN MEETING THE BASIC HIGH PERFORMANCE BUILDING REQUIREMENTS AND THE NET-ZERO ENERGY REQUIREMENTS UNDER §3-602.1 OF THE STATE FINANCE AND PROCUREMENT ARTICLE; AND**

**2. ASSIST LOCAL SCHOOLS SYSTEMS TO COVER THE COST OF RETROFITTING EXISTING BUILDINGS TO MAXIMIZE EFFICIENCY AND ELIMINATE THE USE OF FOSSIL FUELS.**

**(G) (1) THE FUND MAY BE USED ONLY FOR PROVIDING LOCAL SCHOOL SYSTEMS WITH GRANTS OF UP TO \$3,000,000 TO COVER:**

**(I) THE COST DIFFERENCE BETWEEN MEETING THE HIGH PERFORMANCE BUILDING REQUIREMENTS AND THE NET-ZERO ENERGY REQUIREMENTS UNDER § 3-602.1 OF THE STATE FINANCE AND PROCUREMENT ARTICLE; AND**

**(II) THE COST OF RETROFITTING EXISTING BUILDINGS TO MAXIMIZE EFFICIENCY AND ELIMINATE THE USE OF FOSSIL FUELS IN SCHOOL BUILDINGS.**

- Article — Environment, Section 2-1505(c)(2): Modify to read: **“The county board, having made a good faith effort to obtain federal, state, or private funding sufficient to cover the incremental costs associated with contracting for the purchase or use of school buses that are zero-emission vehicles, is unable to obtain such funding.”**

The goal is to have boards of education try to go zero-emission. They should have to at least try to get funding to cover the incremental costs, not just say they couldn't get funding.

- 4-809(f)(6): Change “ensure that” to “provide guidance and assistance to help”.

The Maryland Green Building Council should be provided with enforcement authority that would enable it to ensure the high performance building requirements are met.

Technical amendments:

- 2-407:
  - (B): Change “aircraft observations” to “**aircraft or satellite observations**”.
  - (C) (1) “airplane observations” and (2) “aircraft observations”: Same modification.
  - 2-1206(9) “aircraft observations”: Same modification.
- 2-1206(8)(vi): Delete, create a new number (8) (adjusting the rest of the numbering accordingly, i.e., making the current 8 into 9, etc.), and make the new (8): “**Consider the net effect on the State’s economy and the number of jobs in the State**”.
- 2-1303.1(C)(12): Change “American Wind Energy Association” to “**American Clean Power Association**” (AWEA doesn’t exist anymore. It is now part of ACPA.)
- Section 5 and Section 6 of the bill are duplicative. They are the same revisions of 2-1602. Delete one.

## Attachment A

### Construction Costs of Net-Zero Energy Schools in Baltimore and Howard County

Included below are construction costs for three new NZE schools and the energy use of Wilde Lake Middle School, which is actually net negative — it produces more energy than it consumes. Due to COVID-19, one-year performance data for Holabird Academy and Graceland Park/O’Donnell is not yet available. Wilde Lake has an energy use intensity (EUI) of 13.7 kBtu per square foot per year and produces *twice as much energy* as it consumes. For comparison, Montgomery County Public Schools have an average EUI of 54 kBtu per sf/yr.

According to the Interagency Commission on School Construction, Maryland average school construction costs with site preparation from 2015 to 2021 have ranged from \$261 to \$405 per square foot.<sup>1</sup>

Bid Year	Without Site Preparation (per square foot)	With Site Preparation (per square foot)
2021	\$341	\$405
2020	\$329	\$392
2019	\$318	\$378
2018	\$302	\$360
2017	\$293	\$349
2016	\$282	\$336
2015	\$233	\$261

<sup>1</sup> [https://iac.mdschoolconstruction.org/?page\\_id=4633](https://iac.mdschoolconstruction.org/?page_id=4633)

Wilde Lake Middle School, Columbia (\$320 per square foot with site preparation & solar panels)

- Net-Zero LEED Platinum
- Completion date: August 2017
- Bid year: 2015
- Construction cost, including site preparation and solar panels: \$34,000,000
- Gross square feet: 106,221
- Energy produced during performance period: 821,618 kWh
- Energy use during performance period: 428,301 kWh
- Net Energy Use: -393,317 kWh (net-negative)
- Energy Use Intensity: 13.7 kBTU/sf/yr

Graceland Park / O'Donnell Heights Elementary/Middle School, Baltimore (\$358 per square foot, with site preparation & solar panels)

- Net-Zero LEED Platinum
- Completion date: September 2020
- Bid year: 2018
- Construction cost, including site and solar panels: \$33,752,000
- Gross square feet: 94,070
- Energy performance not yet determined due to COVID-19

Holabird Academy, Baltimore (\$364 per square foot with site preparation & solar panels)

- Net-Zero LEED Platinum
- Completion date: September 2020
- Bid year: 2018
- Construction cost, including site and solar panels: \$34,330,500
- Gross square feet: 94,070
- Energy performance not yet determined due to COVID-19